2nd BRCs Meeting

An update on the BRC program

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Accomplishments
July 2004 – May 2005

- All BRCs have functional web sites
  - http://www.niaid.nih.gov/dmid/genomes/brc/awards.htm
- IP Plan, Program Development Plan, Semi-Annual report, survey of genomic data report
- SWGs (~80 external advisors to 8 BRCs)
  - 2 face-to-face meetings occurred
  - 3 more to occur
- IOWG meeting regularly
  - GFF3 file format adopted
  - Common BRC ftp site is now available ftp://ftp.tigr.org/pub/brc
- HPWG not meeting regularly
- 2 programmatic meetings held

BRC2 meeting agenda

- Focus on data types and software tools for
  - Annotation
  - Comparative genomics
  - Genome sequence polymorphisms
  - Other topics
- VBI / PATRIC Tour
- Presentations and other hand-outs will be posted on the NIAID BRC web site
- IOWG session
- Food
  - Meal orders in your registration form
  - Dinner get together tonight
  - Sign up at the reception desk
- Wireless connection

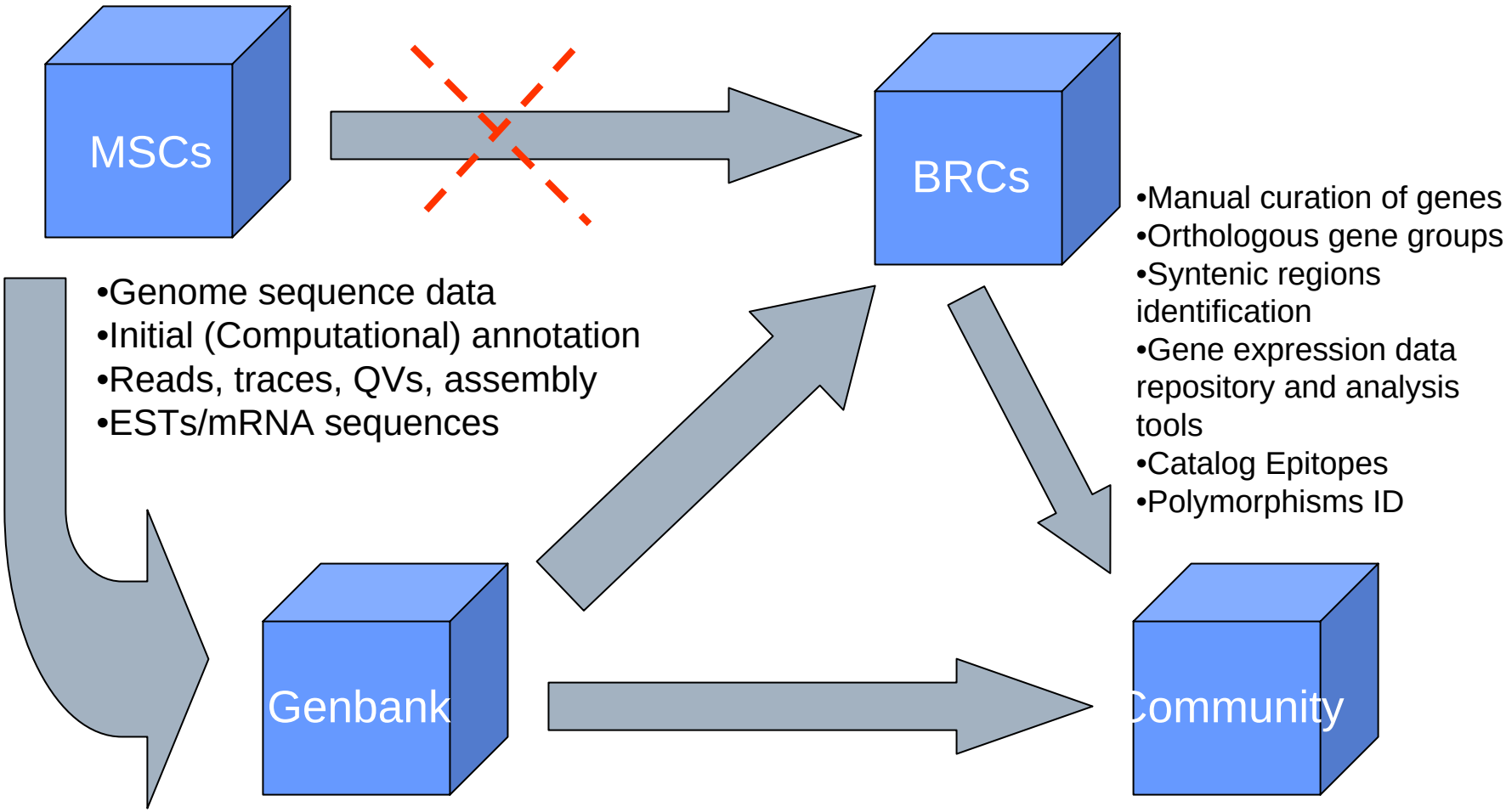
Microbial Sequencing Centers

NIAID

Currently Funded sequence projects 2004-2005

- Aedes aegypti
- Aspergillus
- Bacillus anthracis
- Burkholderia cenocepacia
- Burkholderia dolosa
- Burkholderia mallei
- Burkholderia pseudomallei
- B. pseudomallei-Bacteriophages
- Coccidioides
- Coronaviruses
- Coxiella burnetii
- Culex pipiens
- E. coli
- Entamoeba
- Campylobacter
- Francisella tularensis
- Hepatitis C
- Influenza
- Ixodes scapularis
- Listeria monocytogenes
- Mycobacteria tuberculosis
- Plasmodium falciparum
- Plasmodium vivax
- Pseudomonas aeruginosa
- Shigella
- Streptococcus pneumonia
- Toxoplasma gondii
- Trichomonas vaginalis
- Vibrio cholerae
- Yersinia pestis
- Ricinus communis

MSCs and BRCs



NCBI & BRCs

- Meeting in March 2005 on viral genomes among NCBI, VBRC and PATRIC
- VBRC and PATRIC will provide NCBI with
  - human curated Refseqs
  - Choice of reference strain
  - Advisors for viral families
  - A channel to feedback to NCBI sequence and annotation errors

Quality values

- From the SOW- section B.1.a:
  - *(...) Quality values for each individual sequence must be displayed in the database (BRC).*

- Quality values for the BRCs organisms must be deposited into NCBI trace archive
  - BRCs should facilitate data submission from sequencing centers
  - BRCs should ensure easy access to the NCBI traces and related information

Program evaluation suggestions

- System
  - Web site usage
  - S/W Functional testing; data and DB integrity testing; GUI testing; performance profiling; load, stress and volume testing
- Administration
  - Accomplishment of itemized tasks and adherence to timelines
  - Number of times BRC failed to do something within its scope
- Curation performance and data quality
  - Number of curated genomes and genes in BRC with respect to Genbank
  - Number of error fixes (sequence, annotation, etc.)
  - Number of microarray, proteomics MS, SNPs, 3D structures, antigen/epitopes uploaded
  - Frequency of updates

Goal

To facilitate the identification of potential targets for the development of vaccines, therapeutics and diagnostics

BRCs are resource providers

- Outreach to the vaccine, diagnostics and therapeutics developers
  - Training, tutorials, workshops
  - BRC research collaborations and publications, publications citing BRC
  - Feedback from scientific community and SWG
  - OS license for s/w and usage documentation
  - Other “services” to the community

Next programmatic meeting

Feb - Mar 2006

- At another BRC site
- Progress from all the BRCs
- Interoperability

Volunteer sites needed

Acknowledgments

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- Ross Overbeek, Rick Stevens, David Roos, Steven Salzberg, Owen White
- Bruno Sobral (VBI)

Q & A